



NEW BRUNSWICK
INDUSTRIAL SAFETY COUNCIL
CONSEIL DE SECURITE INDUSTRIELLE
NOUVEAU-BRUNSWICK

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Honourable R. E. Logan
Minister of Labour
New Brunswick Department of Labour
Fredericton, New Brunswick

Dear Sir:

I have the honour to submit herewith the Report
of the New Brunswick Industrial Safety Council
for the year ended December 31, 1974.

Respectfully submitted,

Geo. Rundle

G. H. O. Rundle,
Chairman

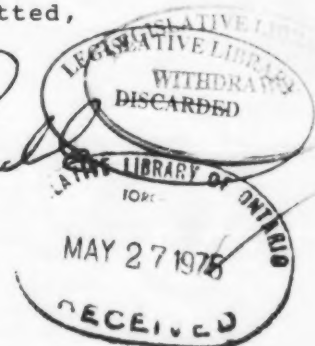


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REPORT OF THE CHAIRMAN

We entered the year 1974 with cautious optimism, realizing that as man-hours worked increased, the number of injuries resulting from industrial accidents would also increase unless effective accident prevention practices were stepped up at least proportionately.

Council Program

With this in mind, the Council placed particular emphasis on those areas of its 1974 program which would assist industry to meet this challenge.

Accordingly, the Council concentrated on:

- (a) Assisting with the up-grading of existing or establishing the Council's new Seven-Step In-Company Safety Program particularly in Priority Companies;
- (b) Stepping up the number of specialized Industry Class Seminar/Workshops conducted in various locations throughout the province;
- (c) Urging industry to take greater advantage of the Council's programming and supervisory and employee safety training services and facilities.
- (d) Continuing our safety training of Technical High School and Institute of Technology students prior to their entry into the work force.

The Outcome

Despite our efforts, Industrial Fatalities totalled 37 in 1974, ten more than in 1973. Industrial injuries reported increased by 14.6% over the previous year while man-hours worked increased by only 5.4%. The collective Frequency Rate for the five main classes of industry, that is Mining, Forestry, Manufacture & Sale, Construction, and Transportation, rose by 7.9%; the Severity Rate by 1.8% and the Cost Rate by 5.6%.

We of the Council derive some satisfaction in assuming that our endeavors contributed to the prevention of these statistics from climbing beyond the recorded level. We are, however, determined to more vigorously pursue our efforts to break down the apathetic attitude towards safety in industry which continues to exist in some areas.

Executive Committee

The Executive Committee met on ten occasions during the year. The only change in membership of this Committee was the appointment of Mr. Everett Reicker of Fredericton, replacing Mr. Steven Gomori of Fredericton who resigned.

Advisory Board

The Executive Committee gratefully acknowledges the helpful suggestions and recommendations proposed by the Advisory Board under the chairmanship of E. Roger Roy.

The Board met on four occasions during the year, the first in Fredericton in February; the second in Saint John in April during the annual conference; the third in Hartland in August and finally in Saint John in December.

During the February meeting, the Board recommended that the Executive Committee of the Council make representation to the Provincial Secretary recommending that safety check lanes be established by the provincial government for the purpose of checking all sizes of commercial vehicles and the loading and securing of equipment and materials on such vehicles.

During these meetings, suggestions relating to the Council programs were made and in particular, recommended that the Council plan for expansion to keep abreast of technological change in industry and to meet the growing demands the Council can expect.

Annual Conference

Our Eleventh Annual Industrial Safety Conference, held April 28, 29 and 30th of last year at the Admiral Beatty Hotel in Saint John was acclaimed by a record number of delegates attending as one of the most successful in the history of the Council. Outstanding speakers, informative industry workshops together with a high degree of delegate enthusiasm and participation prevailed throughout the duration of the conference. A detailed account of the Conference, together with a resume of Council functions carried out in 1974 by the Executive Director and his staff, follows in this report.

Summation

While some progress is being made, it appears that only as the costs of accidents and injuries in industry continue to rise, will management as a whole come to realize that in order to survive, safety in industry will have to be placed on an equal basis to that of production.

By continuing to 'hammer this home' and by consistently promoting the availability, and increased use by industry of Council services, we will continue to strive to make New Brunswick a safer place in which to work.

Acknowledgements

I take this means to express my personal gratitude to the members of the Executive Committee for their cooperation and support. On behalf of the Executive Committee, I express the appreciation of the Council to the Executive Director and his staff for their devotion to a most worthy cause; and to all concerned in Industry, Labour and Government for their continued interest, participation and support.

G. H. O. RUNDLE
Chairman

REPORT OF THE EXECUTIVE DIRECTOR

Council functions continued to be administered, during 1974, by the Executive Director and his staff consisting of a Training and Education Supervisor and seven Field Representatives, a Public Relations and Promotion Supervisor, a Statistician and an office staff of four.

The New Brunswick Forest Industries Safety Association functions continued to be administered by the Manager, his secretary and three Field Representatives who continued their program of woodlands and sawmill operations safety programs. Their 1974 activities are included under a separate heading in this report.

Council Program

The Council's 1974 program was structured so as to expand the activities of each department to the greatest possible extent. Based on the premise that as the employed labour force and man-hours worked increase, so too must accident and injury control efforts be increased; our objective was, and continues to be, to promote and assist industry, labour and government to do just that.

Training

More concentrated effort was directed to the three main phases of our training program — Priority Companies (those experiencing higher than average Frequency and Severity Rates); Seminar/Workshops; and Community College student training.

Priority Companies

Our Priority Company program commences with a detailed review, by a Council field representative with top management of a priority company, of a Safety Analysis Study, prepared specifically for that company by our statistician. As a result of this review, the field representative recommends and offers his assistance in the strengthening of the company's existing safety program, or, the establishment of the Council's 'Seven-Step In-Company Safety Program'.

Seminar/Workshops

Our experience confirms our belief in the necessity for continuing specialized safety training as it relates to each industry class. We continued with our policy of assigning each field representative the responsibility of specializing in the safety training of a specific industry class and conducting an increased number of specialized industry Seminar/Workshops. These were conducted at various locations throughout the province to facilitate attendance and included Construction, Manufacture and Sale, Mining, Transportation, and Pulp and Paper.

Community Colleges

Realizing the importance of 'reaching' the pre-labour force of students in Industrial High Schools and Community Colleges, we stepped-up our student safety training program and increased, to a considerable degree, the number of students trained in 'The Proper Manual Handling of Materials'; 'Hand Safety'; 'Eye Safety'; 'Personal Protective Equipment'; 'Orientation' and 'First Aid'.

Safety Oriented First Aid

With the adoption this year of a policy to promote First Aid training in industry, initially, we featured an article in our newsletter announcing the endorsement, by the Council, of the new St. John Ambulance 'Safety Oriented First Aid Training Course', and commending this training to industry. This was followed up by our Field Staff who made a point of recommending this training at every opportunity.

We then sponsored an 'Introduction to Industry' offer of this new course and, in cooperation with St. John Ambulance, conducted the course at six of the province's largest centres, at special rates. The offer was over-subscribed in all locations. We are continuing to work closely with the St. John Ambulance in this connection.

Total Loss Control

We continue to pursue a predetermined course, adopted about three years ago, to evolutionize our program to the concept of Total Loss Control. In our field program, we have used extensively Damage Control, and Loss Control in relation to personal injury incidents and we have studied and been exposed to the concept of Total Loss Control for some six years. Within the next two years, we are working towards a practical program of Resource Conservation in industry, (all aspects of Total Loss Control) and it is intended that the practical application will be available to industry within that time, and that the theory will be by then thoroughly accepted.

Other Training

Other industrial safety training activities conducted by Council staff are outlined in detail later in this report.

Promotion

With the adoption of our newly approved identification symbol and signature, we commenced a transition program aimed at fostering instant recognition and at the same time improving our print image. By insisting on constant uniformity in its use, wherever the Council is identified, we believe we are accomplishing these aims.

Television and Radio, News Media and Periodicals continued to be our principal means of promoting safety in industry, publicizing Council activities and advertising the availability of Council services.

Television and Radio

We continued our television coverage thirty-four weeks of the year, using both English and French safety 'Commercials', produced by the Council, and primarily aimed at reaching worker personnel in all areas of the province. Similar 'Commercials' were aired on most New Brunswick radio stations during the summer months when we are not on television.

News Media and Periodicals

We continue to enjoy good news media relations and most of our activities receive coverage. Limited newspaper advertising prior to certain seminar/workshops and our annual conference, is used to promote attendance. Our 'Working Safely' newsletter, now enlarged to six pages, and our 'This . . . Could Happen to You' bulletins, both published bi-monthly continue to serve their intended purposes. Evidence of readership is repeatedly indicated by requests for additional copies and increased response to offers of safety posters, newly published booklets and pamphlets and promotional aids.

This is substantiated by the fact that a record number of safety posters were distributed this year, as a result of periodic descriptive listings in our newsletter of available posters; the response to an offer of a newly published 'Orientation' program booklet resulted in our being required to print a second edition; within two weeks of publication of an offer of newly designed 'Think Safety' symbol stick-ons for safety hats, machinery and equipment, our initial order was completely sold out.

Annual Conference

Our Eleventh Annual Industrial Safety Conference, held in Saint John attracted a record attendance and proved successful in every aspect. Each year we assess the attendance, response and participation in our conference for the purpose of determining the feasibility of conducting another the following year. The enthusiasm and participation on the part of delegates attending our 1974 conference indicated, without doubt, that a conference should be conducted again in 1975.

Again, details of our promotional activities are outlined later in this report.

1974 Statistics

Despite the earnest efforts on the part of all concerned to carry out our stepped-up 1974 program, much of the ground gained in improving the industrial safety picture in the province in 1973 was lost in 1974. We continued to be faced with apathy in many instances and little heed was paid to our warnings and forecasts of impending trends. With some exceptions, too many companies elected not to take advantage of our services and offers of assistance with positive accident prevention action.

Consequently, the number of Fatalities reported rose from 27 in '73 to 37 in '74. The number of injuries reported collectively by the five

main classes of industry, that is, Mining, Forestry, Manufacture and Sale, Construction and Transportation, increased by 14.6% over the previous year while man-hours worked increased by only 5.4%. This resulted in the collective Frequency Rate rising from 76 to 82, an increase of 7.9%; the Severity Rate rising from 625 to 635, an increase of 1.8%; and the Cost Rate rising from \$18,543 to \$19,588, an increase of 5.6%.

STAFF TRAINING

The Field Staff, and the Training Supervisor successfully completed the St. John Ambulance "Safety Oriented First Aid" course and are now qualified instructors.

Council and N.B.F.I.S.A. Field Staff attended a "Group Leadership Techniques" course.

One Field Representative attended a one-week training session "Training Objectives and Methods" conducted by the Noranda Group Superintendent of Training Services.

One Field Representative attended a four-day safety coordinator course at I.A.P.A. training centre, Toronto.

One Field Representative attended a four-day seminar on Petroleum Fire Prevention at Saint John.

Six Field Representatives spent a full week during the summer in the Council Office at Saint John. The intention was for study and development of course and seminar material in their speciality.

Member(s) of Council Staff attended:

Annual Transportation Safety Association Conference in Ontario;

I.A.P.A. of Ontario annual conference;

Annual Newfoundland safety conference;

Annual Ontario Pulp & Paper safety conference;

Canada Safety Council conference.

Staff Meetings

Five Staff Meetings were held during the year in the Council office at Saint John. These meetings were valuable as they resulted in a worthwhile exchange of ideas and field experience. Progress towards objectives was reviewed with the discussion of special projects and solving of field problems.

Safety Periodicals

All Field Staff are on the mailing list for magazines, periodicals and other releases which will be of assistance to them. Resources of the Council library are available to all.

FIELD ACTIVITIES

The acceleration and speed-up of production in industry, brought about by automation, means that every minute of "down-time" costs more in lost output than ever before. Delay is becoming increasingly costly.

More than ever, reduced operating costs and increased productivity is the formula for a thriving and successful company. The blend will be interrupted if top management does not have an effective program to prevent accidents which result in physical harm to their people and/or damage to company property and materials.

Priority Companies

Just as the system approach to safety in aerospace was a major factor in preventing failures that could wipe the mission out, a systematized program has been developed by Council primarily for use by Priority Companies.

Seven-Step In-Company Safety Program

This is a functional management procedure which demonstrates how policy, records, investigations, inspections, training, first aid and safety committees should operate to attain a reduction in accidents and injuries.

Priority Companies are explicitly identified through our statistical program and a listing is published every second month, indicating frequency and severity.

Using the Priority listing for direction, a regulated and controlled approach is made to firms which demand attention. A back-up statistical study is presented to top-management which shows their standing in comparison to their group. Special statistical studies are prepared when needed or requested.

Contacts and Meetings

3,049 contact calls were made by our Field Staff during the year.

404 Field Meetings were conducted for Management, Supervision, Employees, Safety Committees and Apprentices. Attendance at these meetings — 5,929. This figure does **not** include special field events such as seminars; high school and community college meetings; safety coordinator courses; first aid courses and other events listed below.

Training Films

Seventeen new safety training films were purchased during the year. We now have 111 films in the Council library. Bookings for the year were 1,204 with an attendance of 25,537.

Special Field Events

Annual conference in Admiral Beatty Hotel at Saint John, N.B. on April 28, 29, 30.

One-day safety seminar/workshops conducted throughout the province:

Number	Type	Attendance
7	All classes of Industry	389
5	Construction	113
6	Manufacturing	144
11	Pulp and Paper	192
2	Mining	226
23	Transportation	449

Industrial High School students in Grades X, XI, XII, enrolled in Trades Schools and Institutes of Technology were held by means of 133 meetings, 6,348 students attended.

A Safety Coordinator Course was held at Fredericton — 15 attended.

A Safety Coordinator Course was held at Moncton — 16 attended.

Safety Oriented First Aid courses by Council Field Staff in cooperation with St. John Ambulance were conducted at Saint John, Edmundston, Fredericton, Bathurst, Woodstock and Moncton. Seven Courses in all — 180 attended and certificates were issued.

One Course was held at Deer Island — 13 attended.

Nine twelve-hour Supervisory Loss Control Courses were presented with a total attendance of 83.

Eight ten-hour Supervisory leadership training courses were presented to a total attendance of 67.

Sixteen one-day Fork Lift courses were conducted for a total attendance of 198.

One full week of safety training was conducted for 10 supervisors of a Shippegan Company. It was held on company premises.

Six special sessions on lifting and carrying were conducted at a local hospital. 203 people were present.

A safety week was observed by a local company in late April. Posters and handout literature was supplied by Council and a special meeting was conducted for all employees by our Field Representative.

Topics were Lifting, Fork Lift Hazards and Personal Protective Equipment.

A one-day compressed session on Loss Control was presented for 20 Supervisors at Fundy National Park.

Other Field Events

A special six-hour session on Construction Safety was presented to the Industrial Safety Inspectors, Department of Labour, at Fredericton, by one of our Field Representatives.

A special safety session was presented to 14 members of the United Transport Union at Moncton by one of our Field Staff.

Public speaking engagements by Council staff included:

At a dinner meeting for a Moncton Company, ten years without a lost-time injury;

At the Mining & Metallurgical Accident Prevention Association at Bathurst;

At a special awards dinner, sponsored by Saint John Shipbuilding;

At a safety banquet conducted by Atlas Construction (Maritimes) Limited;

At a safety dinner by Miramichi Timber Resources;

At the graduation of 105 Construction students at New Brunswick Institute of Technology, Moncton;

At the graduation of 100 students in welding motor vehicle and machine shop trades at N.B.I.T., Moncton.

Seven fire and electrical demonstrations were presented by one of our Council Representatives.

Our Council display was set up at Valley Forest Products Limited. It was a special day, celebrating delivery of 1,000,000 cords of wood to the St. Anne-Nackawic Pulp Mill

A two-hour Industrial safety presentation was made to the Bathurst District Labour Council by our Representative in that area, on November 3rd.

Thirty Gold Cap Awards were presented during the year.

Thirty-eight home study courses were placed in the field.

A new home study course is being developed and it will be ready for release early in 1975.

PROMOTION REPORT

With the approval and adoption of a new and contemporary identification symbol and signature, considerable concentration was directed, during 1974, toward achieving consistent uniformity and improved design wherever the Council is identified.

This, we believe, has considerably improved the print image of the Council.

We are continuing to up-date and up-grade the content of our publications; the most significant was the complete revision of the booklet formerly entitled 'You and the New Brunswick Industrial Safety Council'. Newly entitled 'This is the New Brunswick Industrial Safety Council', the content has been completely re-written, bilingually, and directed toward management. It outlines the purpose and structure of the Council and details the availability of all Council Statistical, Pro-

motional and Training services including listings of Supervisory and Employee industrial safety training courses and related publications.

Considered to be one of the strongest vehicles by which to promote the use, by industry, of Council services, the broadest possible distribution is underway.

Concentration was also directed toward strengthening those promotional methods and vehicles currently being used and the search continued for new and diversified methods of promoting industrial safety, and the Council. These include:

TELEVISION

Because of increased rates on all stations, in order to continue our thirty-four week, prime-time television coverage on all English and French networks in the province, and two Quebec French stations which beam into New Brunswick, we elected to cut back from eight occasions, seven evenings weekly, to six occasions weekly.

Our television coverage was augmented this year with the showing, on seven thirty-minute occasions, of several of our safety training films in their entirety, free of charge, through the courtesy of CHSJ-TV. This was negotiated with the station when it was learned that late evening time slots immediately following the National News were available during their change-over period from summer to fall schedule. It is intended to repeat this again in 1975; not only in the fall, but whenever such times become available.

We produced eight new English and twelve new French 'commercials', and by means of graphically incorporating our new identification symbol, emphatically emphasized our identity.

Our library now contains forty-five English and thirty-one French video-taped safety messages dealing with most types of injuries.

RADIO

Again in 1974, we conducted an eight-week radio campaign during July and August when not on television. Once again through the cooperation of most radio stations, our 'commercials' were aired in English and French, in ratios ranging from three to six occasions per day, for each one paid at specially reduced rates.

NEWS COVERAGE

Pre-event and post-event news coverage of our major activities by all media continues to be adequate. However, because of the frequency, the nature, and the numbers attending many of our seminar/workshops (attendance is purposely restricted in certain cases in order to foster effective participation), many of these events are not considered by the news media to be sufficiently newsworthy to warrant coverage. Nevertheless, we are continuing our efforts to improve this situation. This is not intended to imply any lack of cooperation on the part of the media and we continue to enjoy excellent news media relations.

PERIODICALS

Our bi-monthly newsletter 'Working Safely' and 'This Could Happen to You' bulletins continued to serve their intended purposes. In addition to keeping industry informed of Council activities, and promoting Council services, we continued to allot a good percentage of space to safety articles related to all classes of industry.

Through this medium during 1974, we promoted, on several occasions, the more extensive use by industry of safety posters. As a result, together with the efforts of our field representatives, we distributed some 12,000 multi-size posters this year.

PROMOTIONAL AIDS

Late in 1974, we developed a new safety symbol 'stick-on', for use by all classes of industry throughout the province.

These 2½" x 3" 'stick-ons' made of durable, all-weather resistant, pressure-sensitive vinyl, are designed to act as constant reminders to everyone to 'Think Safety' at all times. They can be easily affixed to safety hats and all types of machinery, vehicles, and equipment.

Within two weeks of announcing in our Newsletter that they were available, we had completely sold out our initial order and at year-end orders were still being received.

It is intended to continue to promote this item with the hope that in time, all safety hats, the dashes and/or windshields of every commercial vehicle and all machinery in the province will bear this safety symbol.

ROAD BUILDERS' ASSOCIATION OF NEW BRUNSWICK

For the first time in the twelve year history of the Canadian Construction Association's Annual National Safety Contest, the Road Builders' Association of New Brunswick placed first in the 1974 contest.

During the contest period August 5 to August 30, 1974, New Brunswick Road Builders recorded 322,513.5 man-hours worked with six lost-time accidents for the best frequency rate of 18.6.

Diamond Construction of Fredericton, who recorded 36,666 man-hours worked with no lost-time injuries won the Industrial Safety Council plaque, awarded each year to the New Brunswick contractor with the best frequency rate during the period of the national contest.

And Diamond Construction also won both classes of the annual provincial safety contest, conducted each year by the NBRBA during the period May 1 to November 30.

In **Class I** they recorded 384,329 man-hours worked with five lost-time injuries for the best frequency rate of 13.01.

In **Class II** their 96,059 man-hours worked with four lost-time injuries resulted in the best frequency rate of 41.64.

We of the Council, 'tip our safety hats' and offer sincere congratulations to the NBRBA and to Diamond Construction.

CONFERENCE

The Council's eleventh annual Industrial Safety Conference held April 28, 29, and 30th at the Admiral Beatty Hotel in Saint John was acclaimed, by a record 380 delegates attending, as most successful.

A. J. 'Scottie' Gerrie, Superintendent of Training Services, Noranda Group, Noranda, P.Q., was Keynote Speaker and his address on 'Productivity vs Safety Performance' established a keen interest and participation from the outset, and this prevailed for the duration of the conference.

'The Preachin' Deacon', William P. Headley, Assistant Safety Manager, Columbia Distribution Companies, Columbus, Ohio, was featured Luncheon Speaker. His unique use of hilarious humor to emphasize his safety messages, 'struck home' to all present.

Another feature of the luncheon was the presentation by G. H. O. Rundle, Chairman of the Industrial Safety Council, of the Council's Bronze Plaque in recognition of ten years of Injury-Free operation to J. A. Spinney, Manager of C.I.L.'s Dalhousie Works. This marked the first time any company had earned this award in the history of the Council.

Once again one afternoon was devoted to simultaneous industry safety workshop for delegates representing Mining, Forestry, Manufacture and Sale, Construction, Transportation, Pulp & Paper, Municipalities and Public Works and Hospitals. Various topics were discussed during each workshop.

Other highlights of the conference included: Addresses by Hugh M. Steeves, Mill Manager, Kimberly-Clark Canada Ltd., Saint John; W. Frank Chafe, Director, Government Employees Department, Canadian Labour Congress, Ottawa; J. H. Farthing, Commissioner, N.B. Workmen's Compensation Board, Saint John; H. J. Fournier, Fire Marshall, Province of New Brunswick, Fredericton, and members of the Council Staff.

John D. Abell, Plant Manager, and C. L. Harris, Safety Supervisor, International Harvester Co., Hamilton, Ontario, presented a resume of their company's safety program.

During the Province of New Brunswick Annual Awards Dinner, the featured speaker was Stephen T. Pyke, Chairman, Workmen's Compensation Board of Nova Scotia.

Deputy Minister of Labour, R. P. Campbell, presented Industrial Safety trophies to representatives of the following companies:

- Group I in excess of 800,000 man-hours worked — Consolidated Bathurst for the third consecutive year;
- Group II 200,000 to 800,000 man-hours worked — Moncton Publishing Company;
- Group III 60,000 to 200,000 man-hours worked — Byron MacDonald Ltd.

The Twelfth Annual Industrial Safety Conference is scheduled for April 27, 28 and 29, 1975, at the Admiral Beatty Hotel in Saint John.

STATISTICAL PROGRAM

Statistics makes its most useful contribution to a safety program by its monitoring of trends. This necessitates the implementation of a basic input, with the trend indicated and varied through input of variable data. This combination is built into our system and keeps our statistics current.

In the past year our basic statistical system has remained somewhat the same, however more effort was expended into putting information from the system into more extensive and meaningful usage. Many government interests as well as concerns from private industry are making increasing use of the information from our statistics.

The source data originates with the provincial Workmen's Compensation Board. This is fed into a computer installation which processes and edits the data to accommodate our specific requirements.

Because statistics are such an integral part of our Council program, it is important that this increase in analytical span be made in such a fashion as to make our system both sophisticated and adaptable to our varied safety program.

During the past year, efforts have been made by the four safety organizations in cooperation with four Atlantic Province Compensation Boards, to move to a system of statistics relative to all our jurisdictions, and to be useful as comparison to the four provinces. It is hoped that a basis may be established in the next twelve months, to put such a system into effect. This in turn can be provided to Statistics Canada for input into their Canada wide program, to give the Maritime picture as a whole.

Another purpose of this statistics standardization is to provide each province with shared information, and thus shared experience in industrial safety activity.

A Statistical Report, which fully enumerates by various illustrative methods, comprehensive comparisons of the industrial accident situation in New Brunswick during recent years, follows as Exhibit 'C' of this report.

LIBRARY AND RESEARCH

With a broadening scope of activities and more emphasis on technologies in industry, we are continuing to expand our library facilities and content in an endeavour to keep pace with demand.

Research continues to be an area that is lacking in our organizational set-up. More awareness of this void and requirement to fill it is becoming apparent, and it is anticipated that within the following year, steps will be taken to establish a Research and Development Program.

Our Library facilities have been expanded to include a substantial number of industrial safety educational and training volumes, periodicals, statistical and technical data.

We continue to subscribe to the International Occupational Safety and Health Information Centre (Geneva) Service (CIS) and, the National Safety Council technical data sheet service covering most subjects of a related Industrial Safety nature which we make available, without charge, to industry.

NEW BRUNSWICK FOREST INDUSTRIES SAFETY ASSOCIATION

The 1974 Logging Season showed an improvement over the previous year. The labour force for most of the operations was sufficient to produce wood requirements for the various mills.

Accident frequency and severity seem to be levelling off in group 201 (conventional logging), and there is a decline in the cost rate in this category. A similar situation is apparent in group 204 (mechanical logging) although the cost rate is continuing to climb. If the downward trend in frequency and severity continues, then the cost rate will also decline accordingly.

The situation is disturbing in group 202 (sawmills). Both frequency and severity increased sharply in 1974 although the cost rate remained close to that of last year. If this increasing trend is not stopped in 1975, then costs are going to escalate, the result being increased demerit charges and quite possibly a higher assessment rate.

Statistics

Statistics, as reported by the Industrial Safety Council reveal the following:

Fatal Accidents	Logging			
	Class	1974	1973	1972
— Logging	201	3	2	2
— Sawmills	202	2	—	—
— Mech. Logging	204	3	2	6
(1) Compensable Accidents	201	840	915	730
	202	381	338	254
	204	475	430	358
(2) Man Hours Worked (000's)	201	6,446.9	6,520.8	5,404.4
	202	4,376.8	4,396.6	3,781.1
	204	6,940.1	4,809.4	5,129.6

(1) These are accidents processed for all of the logging industry, and comprise only those accidents occurring in a specific year.

(2) Note that man hours in group 204 continue to increase due to more employers qualifying for the lower mechanical rate.

Merit and Demerit Ratings

The 50% Merit and Demerit system continued in 1974 for groups 201 and 204. In general, employers with a good accident record can realize a merit credit of 40% x assessment rate, with some adjustment in order to balance merit and demerits. Employers with a poor accident record can be charged a demerit up to 1.5 x assessment rate. The value of an effective accident prevention program is, therefore, quite apparent.

The N.B.F.I.S.A. continually points out that high demerit charges indicate that the Accident Prevention program on the job should be

examined and that training of woodworkers to upgrade skills, and an effort by the supervisors to prevent unsafe working conditions and practices should be initiated. Unless this is done and constantly maintained at a high standard, the alternative will be more injuries, increased accident costs, demerit charges, lost production and increases in hidden overhead costs.

Field Training

Again in 1974, Association personnel were involved in assisting member companies in the training of woodworkers. Courses in which our field personnel participated included chain saw maintenance and operation, wheeled skidder and pulpwood forwarder maintenance and operation. Courses for logging instructors in English and French were given by the N.B. Community College in Fredericton.

A meeting of logging trainers was held in Fredericton in December. At this meeting, the representatives from the various logging companies indicated what type of training would be required during the winter and early spring. Among the courses outlined were training of mechanics for sophisticated harvesting equipment and training in the use of equipment, skills, maintenance and supervision for sawmill operations.

Also explained was a proposed 24 week course for young people wishing to enter the forest industry, to be held at the Miramichi Valley High School beginning January 1975. There is a good possibility that this type of training could extend to other High schools in the province.

Association personnel were involved in short training courses with the following:

- (a) Course — Mechanical saw operation — Dorchester Penitentiary — (January 1974)
- (b) Course — Mechanical saw operation, mill yard — St. Regis Paper Co., Bucksport, Maine — (January 1974)
- (c) Lecture — Operation of N.B. Forest Industries Safety Association Inc. — Students, Maritime Forest Ranger School — (February 1974)
- (d) Demonstration and talk — (Chain saws) — Carleton and Victoria Christmas Tree Producers — (February 1974)
- (e) Lecture — Identification of various types of Logging Equipment — Field Inspectors, Dept. of Labour — (March 1974)
- (f) Demonstration and talk — (Chain saws) — Woodlot owners, Rogersville — (December 1974)

A beginning was made on developing a visual aid presentation on saw maintenance practice in sawmills. With the co-operation of Mr. Alfred Blizzard, Tracy, N.B., video tape and coloured slides were prepared showing correct procedures in maintaining bandsaws and circular saws. These will be improved and completed in 1975. Use will be made of these training aids in developing safe working habits among sawmill personnel.

Staff Training

Association personnel attended the following seminars:

- (a) Group Leadership Course — N.B. Industrial Safety Council — (February 1974)
- (b) Total Loss Control — John Fletcher of John A. Fletcher and Associates Ltd., Toronto — Loss Control Consultants — (April 1974)
- (c) Multi-Media First Aid — St. John's Ambulance through N.B. Industrial Safety Council — (December 1974)

General

A serious situation exists among the sawmill operators, where a sharp increase in frequency and severity will eventually result in soaring costs. A determined effort will be made to persuade sawmill employers to reverse this trend in 1975, otherwise they will be faced with large demerits and higher assessment rates.

Association personnel continue to emphasize unsafe working practices among woodworkers. Discussion, persuasion and promotion of good accident prevention among logging employers is continually being done by our field staff.

ACKNOWLEDGEMENTS

On behalf of the Council staff, I wish to express our appreciation:

To the Executive Committee for their continued interest and direction;

To the Executive and staff of the Workmen's Compensation Board for their cooperation, assistance and support;

To the Minister of Labour for his interest and support; and to all members of the Department of Labour who assisted and cooperated with us in so many ways;

To the Audio Visual people in the Department of Education in Fredericton for their competent handling of our film library;

To the management and staff of the Radio and Television stations in the Province for their cooperation and to the news media for their coverage and support of our activities;

To all in Industry, Labour and Government who continue to support and participate in Industrial Safety programs.

To the supervisory, field and office staff of the Council. I express my personal thanks and appreciation for their continued dedication and loyalty.

H. E. BRIGGS

Executive Director

EXHIBIT A

NEW BRUNSWICK INDUSTRIAL SAFETY COUNCILSTATEMENT OF INCOME AND EXPENDITUREYEAR ENDED DECEMBER 31, 1974

	<u>1974</u>	<u>1973</u>
Funds available, January 1 - net	\$ 14,959	\$ 20,611
Grant - Workmen's Compensation Board of the Province of New Brunswick	<u>409,361</u>	<u>380,406</u>
	<u>424,320</u>	<u>401,017</u>
Expenditures		
Operations		
Car expense	13,804	12,157
Conferences - net	1,529	3,101
Directors - expenses	3,943	4,037
- fees	7,600	6,740
Employee benefits	8,021	6,816
Insurance	17	110
Office supplies	4,947	5,019
Postage	3,431	5,203
Professional fees	700	625
Promotion media	39,951	38,339
Rent and electricity	10,116	10,116
Salaries	148,334	132,371
Statistical processing	20,885	20,000
Sundry	3,678	2,936
Telephone	4,328	3,714
Training and education	22,171	15,943
Travel	<u>15,145</u>	<u>13,640</u>
Equipment	308,600	280,867
Automotive purchases (Note 1)	8,812	16,161
Furniture (Note 1)	873	1,904
Grant		
New Brunswick Forest Industries Safety Assoc. Inc.	<u>100,485</u>	<u>87,126</u>
	<u>418,770</u>	<u>386,058</u>
Funds available, December 31	<u>\$ 5,550</u>	<u>\$ 14,959</u>
Represented by		
Cash	\$ 19,051	\$ 21,900
Travel advances and receivables	<u>1,837</u>	<u>2,576</u>
	20,888	24,476
Less: Payables and accruals	<u>15,338</u>	<u>9,517</u>
CERTIFIED APPROVED BY N.B.I.S.C. EXECUTIVE MEMBERS:	<u>\$ 5,550</u>	<u>\$ 14,959</u>

CHAIRMAN

EXECUTIVE DIRECTOR

AUDITORS' REPORT

To the members of the New Brunswick Industrial Safety Council

We have examined the statement of income and expenditure of the New Brunswick Industrial Safety Council for the year ended December 31, 1974. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion the financial statement presents fairly the operation of the Council for the year ended December 31, 1974 in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Saint John, New Brunswick
January 14, 1975

H R. Dams and Company

Chartered Accountants

EXHIBIT "B" — STATISTICAL REPORT

INTRODUCTION

Our statistics are principally derived from the firms active and reporting to the Workmen's Compensation Board in the province. We are most concerned with 4 basic pieces of information:

1. number and type of injuries sustained
2. the time lost due to these injuries
3. the direct costs attributable to these injuries
4. for comparison, the amount of hazard exposure incurred.

The first three factors are related to the magnitude of activity for each firm, group and class, in a series of corresponding rates, using a per million man-hours basis.

All firms are classified by the type of industrial or business activity in which each is engaged.

1. YEARLY COMPARISON

In 1974 new injuries increased by 14.6%, far outstripping a nominal man-hour increase of 5.4%. In the previous year just the reverse of this was the case, when there was a large increase in man-hours with a small increase in new injuries.

Similarly in 1974 there was a 7.3% increase in days lost due to injuries. During the year prior days lost had decreased by 5%.

The direct costs of injuries have risen for the third consecutive year, being 11.4% above the costs of the previous year.

TABLE I YEARLY COMPARISON

Year	Man-hours	FREQUENCY		SEVERITY		COST	
		New Injuries	Rate*	Days Lost	Rate	Total Cost	Rate
1968	215,932,972	17,927	83(27)	148,581	688	\$3,260,745	\$15,100
1969	216,349,707	18,682	86(33)	166,534	769	\$3,173,033	\$14,666
1970	218,174,303	19,279	88(35)	188,583	819	\$4,263,026	\$19,540
1971	222,098,855	18,895	85(32)	169,165	762	\$4,110,694	\$18,508
1972	225,561,379	18,512	82(31)	167,798	744	\$4,357,036	\$19,316
1973	255,185,366	19,297	76(28)	159,465	625	\$4,731,813	\$18,543
1974	269,019,804	22,117	82(28)	171,110	636	\$5,269,434	\$19,588
Change — Prior Year	+5.4%	+14.6%	+7.9%	+7.3%	+1.8%	+11.4%	+5.6%

* Lost-time frequency rate shown in brackets, based on injuries incurring 4 or more work days lost.

II. FREQUENCY OF INJURIES

The year 1974 saw a dramatic rise in both new injuries reported and in frequency of injury. New injuries rose by an unprecedented 14.6%, and the industry frequency rate equaled the 1972 mark of 82, moving from 1973 record low rate of 76.

Table II illustrates all figures pertaining to injury counts for the five industrial classes.

The standard formula for calculation of frequency rate is:

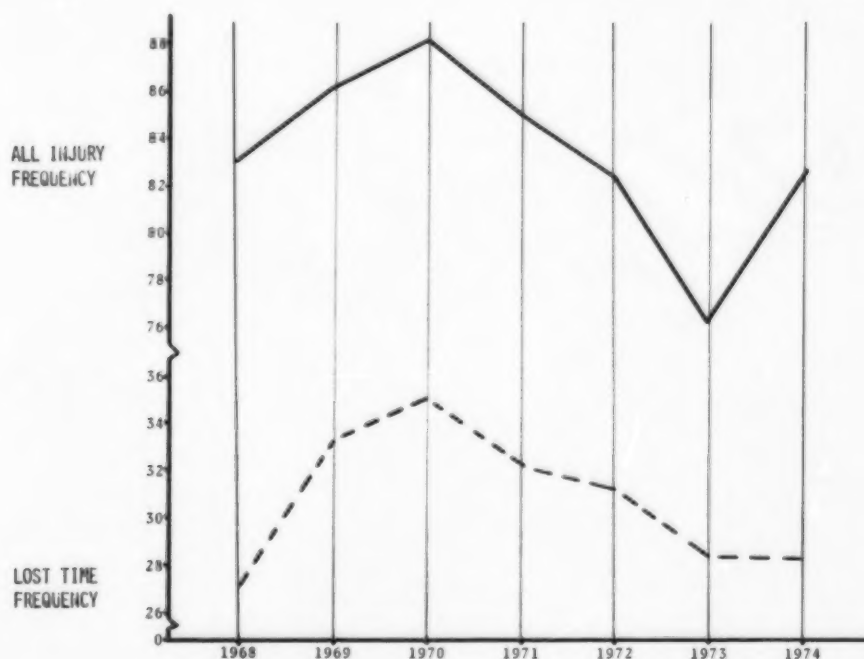
$$\text{* Frequency rate} = \frac{\text{Number of new injuries}}{\text{Manhours worked}} \times 1,000,000$$

The accompanying graph illustrates both frequency and lost-time frequency rates from 1968 to 1974, for the five major classes of industry.

TABLE II

CLASS	Manhours Worked		Current Year Number of Injuries		% Variance	Frequency		% Variance
	1973	1974	1973	1974		1973	1974	
1. Mining.....	7,539,021	8,869,127	605	764	+26.3%	80	86	+7.5%
2. Forestry.....	27,520,226	28,745,097	4,360	4,763	+9.2%	158	166	+5.1%
3. Manufacture and Sale.....	153,840,300	166,922,682	8,745	9,820	+12.3%	57	59	+3.5%
4. Construction.....	54,167,961	48,344,692	4,932	5,568	+12.9%	81	115	+42.0%
5. Transportation.....	12,097,858	16,138,211	1,195	1,202	+0.6%	99	74	-25.3%
* Industry/Current Claims.....	255,185,366	269,019,804	19,297	22,117	+14.6%	76	82	+7.9%
7. C.N.R. and Air Canada.....			467	600	+28.5%			
8. Federal Government.....			732	689	-6.9%			
9. Provincial Government.....			1,083	1,142	+5.4%			
TOTAL CURRENT CLAIMS ALL CLASSES			21,579	24,548	+13.8%			

* Industry Rate is based on the 5 classes for which man-hours are available. No man-hours available for items 7, 8 and 9.



III. SEVERITY OF INJURIES

In 1974 the industry severity rate made its first upward movement since 1970. It was 636 for the year, above 625 for 1973, but not as high as the figure of 744 for 1972.

Industry recorded 171,110 days lost due to injuries which is the highest total since 1970.

Table III pertains to all figures related to time lost due to injury.

The standard formula for calculation of severity rate is:

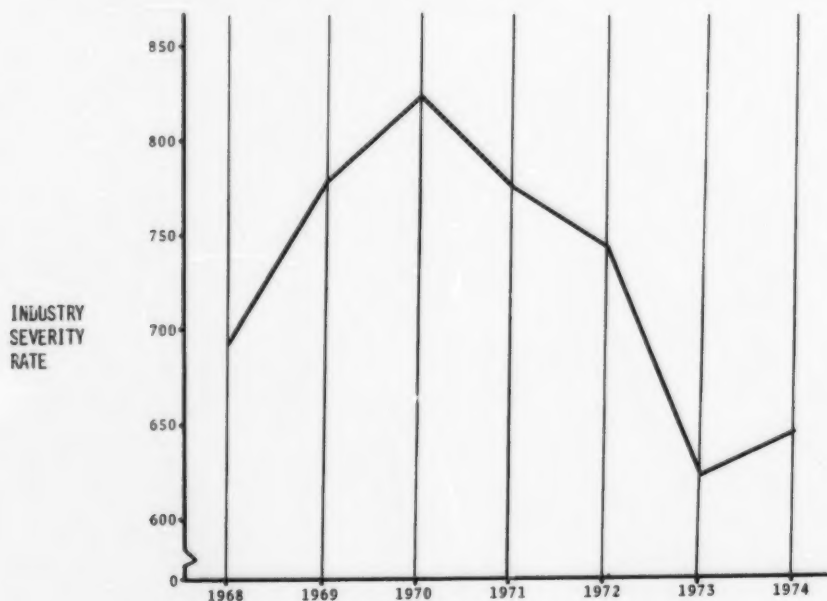
$$^{\circ}\text{Severity rate} = \frac{\text{Number of days lost}}{\text{Manhours worked}} \times 1,000,000$$

The graph below illustrates the industry severity rate from 1968 to 1974.

TABLE III

CLASS	Manhours Worked 1973	Manhours Worked 1974	Current Days Lost 1973	Current Days Lost 1974	% Variance	Severity Rate 1973	Severity Rate 1974	% Variance
1. Mining.....	7,559,021	8,869,122	7,644	6,678	-12.6%	1,011	753	-25.5%
2. Forestry.....	27,520,226	28,745,097	43,088	51,508	+19.5%	1,747	1,792	+2.6%
3. Manufacture and Sale.....	153,840,300	166,922,682	57,749	59,244	+2.6%	375	355	-3.5%
4. Construction.....	54,167,961	48,344,692	36,081	40,327	+11.8%	666	834	+25.2%
5. Transportation.....	12,097,858	16,138,211	14,903	13,353	-10.4%	1,232	827	-32.9%
* Industry/Current Year.....	255,185,366	269,019,804	159,465	171,110	+7.3%	625	636	+1.8%
7. C.N.R. and Air Canada.....			4,007	5,135	+28.2%			
8. Federal Government.....			1,917	1,067	-44.3%			
9. Provincial Government.....			11,876	10,315	-13.1%			
TOTAL ALL CLASSES/ CURRENT YEAR			177,265	187,627	+5.8%			

* Industry Rate is based on the 5 classes for which man-hours are available. No man-hours available for items 7, 8 and 9.



IV. INDUSTRIAL INJURIES COST RATE

In a fashion likened to the frequency and severity rates, the cost rate of most classes of industry has risen substantially after dropping in the previous year.

In 1974 direct costs of injuries for Forestry exceeded all other classes of industry. Forestry had 10.7% of industry's manhours, but consumed 30.2% of current direct costs.

Table IV shows all costs incurred directly as a result of injuries, as well as their respective cost rates.

The standard formula for calculation of cost rate is:

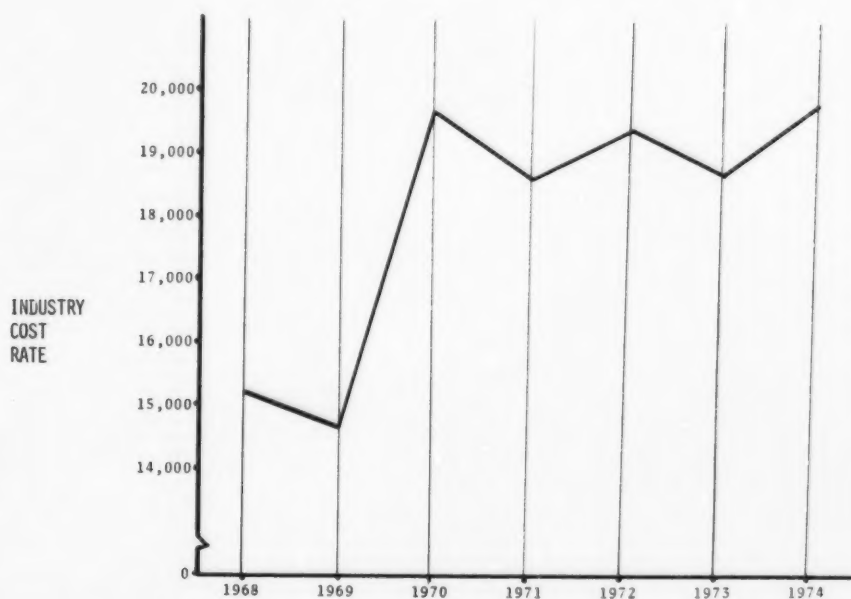
$$\text{* Cost rate} = \frac{\text{Direct injury costs}}{\text{Manhours worked}} \times 1,000,000$$

The all industry cost rate from 1968 to 1974 is shown in the graph below.

TABLE IV

CLASS	Manhours Worked		Total Current Direct Cost \$		% Variance	\$ Cost Rate		% Variance
	1973	1974	1973	1974		1973	1974	
1. Mining.....	7,559,021	8,869,122	293,726	287,983	- 2.0%	38,858	32,470	- 16.4%
2. Forestry.....	27,520,226	28,745,097	1,451,173	1,590,865	+ 9.6%	52,731	55,344	+ 5.0%
3. Manufacture and Sale.....	153,840,300	166,922,682	1,424,335	1,588,057	+ 11.5%	9,258	9,514	+ 2.8%
4. Construction.....	54,167,961	48,344,692	1,130,395	1,305,112	+ 15.5%	20,868	26,996	+ 29.4%
5. Transportation.....	12,097,858	16,138,211	432,184	497,417	+ 15.1%	35,724	30,822	- 13.7%
* Industry Rate.....	255,185,366	269,019,804	4,731,813	5,269,434	+ 11.4%	18,543	19,588	+ 5.6%
7. C.N.R. and Air Canada....			99,273	151,451	+ 52.6%			
8. Federal Government.....			86,888	67,909	- 21.8%			
9. Provincial Government.....			274,552	259,365	- 5.5%			
TOTAL ALL CLASSES/ CURRENT YEAR			5,192,531	5,748,159	+ 10.7%			
Amount Paid Prior Years Claims			4,031,845	4,854,234	+ 20.4%			
TOTAL COST ALL CLAIMS			9,224,376	10,602,393	+ 14.9%			

* Industry Rate is based on the 5 classes for which man-hours are available. No man-hours available for items 7, 8 and 9.



V. EMPLOYED LABOUR FORCE ANALYSIS

Since 1970 new injuries as a percent of N.B.'s employed labour force had declined but again took a sizable hike upwards in 1974. Lost-time injuries in 1974 reached a record high of 7,600, slightly higher than the previous total of 1970. However, the proportion of lost-time injuries to total injuries has decreased slightly, as did the lost-time frequency rate. In addition the severity rate has risen only a slight amount. All of this suggests, that, even though the province has experienced many more new injuries, many of these were of a minor nature only.

Of much concern is the present percentage of new injuries to the average employed labour force. In 1974 it rose to within 3/10 of one percent of our highest yearly record.

TABLE V
EMPLOYED LABOUR FORCE AND LOST-TIME INJURIES AS RELATED TO TOTAL INJURIES

Year	Average Employed Labour Force	Total New Injuries	New Injuries as % of E.L.F. ¹	Total Lost-Time Injuries	L.T.I.'s ² as % of Total New Injuries	Industrial Deaths per 100,000 E. L. F.
1965	185,000	20,602	11.1%	*	*	18.9
1966	190,000	21,104	11.1%	*	*	24.7
1967	190,000	20,693	10.9%	*	*	20.5
1968	192,000	19,964	10.3%	5,801	29.1%	16.1
1969	194,000	20,664	10.6%	7,072	34.2%	13.9
1970	196,000	21,426	10.9%	7,591	35.4%	17.2
1971	198,000	21,154	10.7%	7,203	34.1%	20.2
1972	207,000	20,616	10.0%	7,055	32.6%	19.8
1973	218,000	21,579	9.9%	7,196	33.3%	12.4
1974	227,000	24,548	10.8%	7,600	31.0%	16.3

* Pre-1968 Lost-Time Injury Statistics are not available.

1. E.L.F. means Employed Labour Force

2. L.T.I. means Lost-Time Injuries

VI. DIRECT COST OF INDUSTRIAL INJURIES

One bright note on the statistical scene for 1974 is the reduction in cost per injury. Because many of the new injuries during the year were not of a serious nature, they did not incur such heavy costs, as the previous year.

In general, Transportation enjoyed an improved safety record but for the first time since 1971, exceeded all other classes in the cost per injury analysis.

Table VI outlines the direct costs and average direct cost per injury for all industrial and governmental categories.

TABLE VI

CLASS	Direct Cost \$		Per Cent Variance	Average Direct Cost per Injury By Class in Dollars*	
	1973	1974		1973	1974
1. Mining.....	293,726	287,983	- 2.0%	485	377
2. Forestry.....	1,451,173	1,590,865	+ 9.6%	333	334
3. Manufacture and Sale.....	1,424,335	1,588,057	+11.5%	163	162
4. Construction.....	1,130,395	1,305,112	+15.5%	257	234
5. Transportation.....	432,184	497,417	+15.1%	362	414
7. C.N.R. and Air Canada.....	99,273	151,451	+52.6%	213	252
8. Federal Government.....	86,888	67,909	-21.8%	119	99
9. Provincial Government.....	274,552	259,365	- 5.5%	230	227
TOTAL.....	5,192,531	5,748,159	+10.7%	241	234

* Average represents the total cost for each class divided by the total number of injuries for that class.

VII. INDUSTRIAL FATALITIES

With an advance in injuries of 14.6%, of 5.4% in manhours, industrial fatalities increased by 37% over last year. Total fatalities in 1974 were 37, being in excess of the average annual fatality count of 35 for the past 11 years, and 10 over last year.

TABLE VII

SUMMARY OF FATALITIES

28 Fatalities in 1964									
35 Fatalities in 1965									
47 Fatalities in 1966									
39 Fatalities in 1967									
31 Fatalities in 1968									
27 Fatalities in 1969									
34 Fatalities in 1970									
40 Fatalities in 1971									
41 Fatalities in 1972									
27 Fatalities in 1973									
37 Fatalities in 1974									
JAN.	Mining	Forestry	Manufact.	Const.	Trans.	C.N.R.	Prov. Gov't.	Mon. Total	Y/D
FEB.		2	3		3			6	6
MAR.		1	1					2	10
APRIL			1					1	11
MAY		1	1					2	13
JUNE				2	1			3	16
JULY		1			1			2	18
AUGUST		1		3	1		1	6	24
SEPT.					1			1	25
OCT.	1		1	1				3	28
NOV.		1		1	1	1		4	32
DEC.	1	1	2		1			5	37
CLASS TOTALS	2	8	9	7	9	1	1		

TABLE VIII

STUDY OF N.B. INDUSTRIAL DEATHS BY AGE OF VICTIM AND YEAR OF OCCURRENCE

AGE	1974	1973	1972	3 YEAR TOTAL	PER CENT
0 — 16	—	—	—	—	—
17 — 23	7	6	6	19	18.1%
24 — 30	8	3	7	18	17.1%
31 — 37	7	5	9	21	20.0%
38 — 44	2	2	3	7	6.7%
45 — 51	4	2	6	12	11.4%
52 — 58	7	8	7	22	21.0%
59 — 65	2	1	3	6	5.7%
TOTAL	37	27	41	105	100.0%

As can be seen the majority of fatality victims tend to be among younger workers. One-half of the previous three years' deaths were to victims between 17 and 36 years of age; the average age being 38 years but the most commonly recurring age of death is statistically 32 years old. It is interesting to note that there is a low incidence of death to middle-aged workmen, in the 38-52 age bracket.

For a comparison with incidence of death in industry to average employed labour force, refer to Table V.

TABLE IX — AGENCY INVOLVED IN FATAL INJURIES — COMPARISON 1974/1973/1972

	AGENCY	Mining			Forestry			Manufacture and Sale			Construction			Transport			Industry Classes					Total		
		1974	1973	1972	1974	1973	1972	1974	1973	1972	1974	1973	1972	1974	1973	1972	7	8	9	1974	1973	1972		
	Motor Vehicle	-	-	-	1	1	1	3	2	3	2	1	3	3	2	4	1	-	-	10	6	11		
	Motorized Equipment	1	1	-	5	1	1	1	-	3	1	-	1	1	2	1	1	-	-	10	4	6		
	Materials and Environment	-	-	2	3	6	3	3	1	2	3	1	2	3	-	3	-	1	-	11	6	15		
	Falls	1	1	1	-	-	-	-	1	-	1	3	1	-	-	-	-	-	-	2	5	2		
	Electrical Contact	-	-	-	-	-	-	-	-	-	-	4	3	-	-	-	-	-	0	4	3			
	Drownings	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	2	1	0			
	Miscellaneous	-	-	-	-	-	-	2	-	-	-	-	1	-	1	2	-	2	2	1	5			
		2	2	3	8	5	8	9	4	8	7	9	11	9	6	10	2	1	2	37	27	42		

TABLE X — NUMBER OF INJURIES — CAUSE BY CLASS

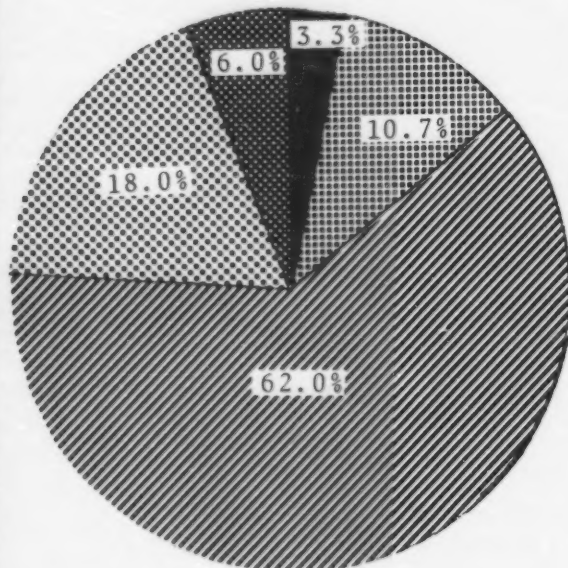
CAUSE	Class 1 Mining		Class 2 Forestry		Class 3 Man. and Sale		Class 4 Construct.		Class 5 Transport.		Class 7 CNR & Air Can.		Class 8 Fed. Gov't		Class 9 Prov. Gov't		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Striking Against and Stepping On	63	8.2	377	7.9	1525	15.5	651	11.7	83	6.9	49	8.2	81	11.8	132	11.6	2961	12.1
Struck By.....	279	36.5	2430	51.0	3303	33.6	1932	34.7	384	31.9	238	39.7	175	25.4	289	25.3	9030	36.8
Caught In, On or Between....	75	9.8	343	7.2	830	8.5	266	4.8	93	7.7	55	9.2	30	4.4	72	6.3	1764	7.2
Collisions and Wrecks.....	4	0.5	36	0.8	60	0.6	48	0.9	54	4.5	9	1.5	9	1.3	36	3.2	256	1.0
Falls and Slips	159	20.8	826	17.3	1746	17.8	1416	25.4	358	29.8	148	24.7	247	35.8	331	29.0	5231	21.3
Temperatures Extremes and Explosions....	16	2.1	60	1.3	437	4.5	319	5.7	22	1.8	17	2.8	13	1.9	26	2.3	910	3.7
Inhalation and Indust. Disease..	68	8.9	114	2.4	213	2.2	79	1.4	9	0.7	7	1.2	18	2.6	28	2.5	536	2.2
Contact with Elec. Current...	0	0.0	7	0.1	32	0.3	21	0.4	1	0.1	3	0.5	4	0.6	0	0.0	68	0.3
Over Exertion...	73	9.6	316	6.6	1059	10.8	477	8.6	112	9.3	68	11.3	98	14.2	139	12.2	2342	9.5
Miscellaneous	27	3.5	254	5.3	615	6.3	359	6.4	86	7.2	6	1.0	14	2.0	89	7.8	1450	5.9
Total.....	764	100	4763	100	9820	100	5568	100	1202	100	600	100	689	100	1142	100	24,548	100

FIGURE 1.

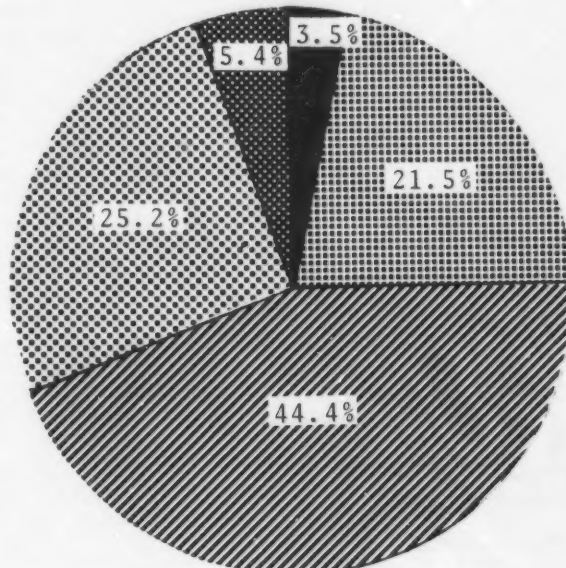
COMPOSITIONAL ANALYSIS BY CLASS

In the center of the pie-graphs presented below are 5 coded tones, representing the 5 industrial classes respectively. When each tone is traced in the 4 circular graphs it illustrates the share each class has of industry's manhours, new injuries, current days lost, and current direct costs in 1974

MANHOURS WORKED



NEW INJURIES



Mining



Forestry



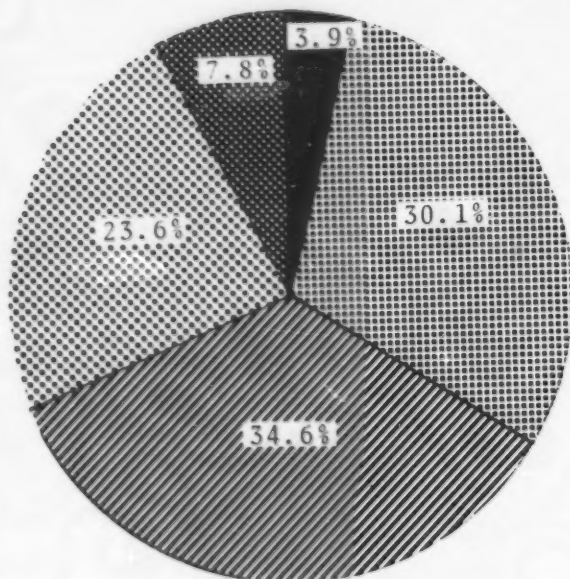
Manufacture
and Sale



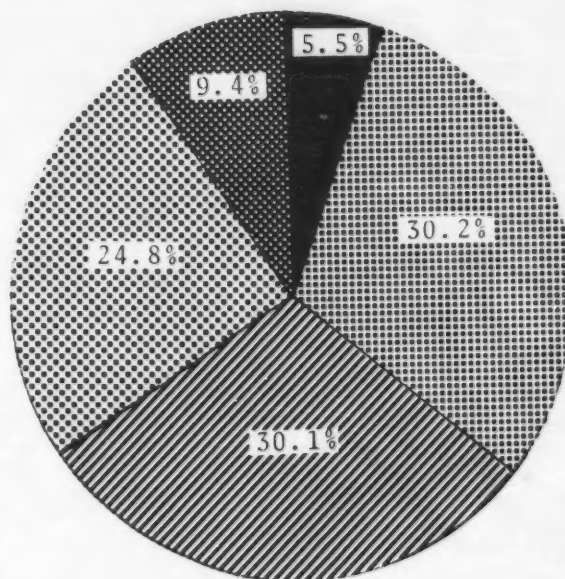
Construction



Transportation



CURRENT DAYS LOST



CURRENT TOTAL COSTS

FIGURE 2
DISTRIBUTION OF INDUSTRIAL INJURIES 1970, 1971, 1972, 1973 and 1974

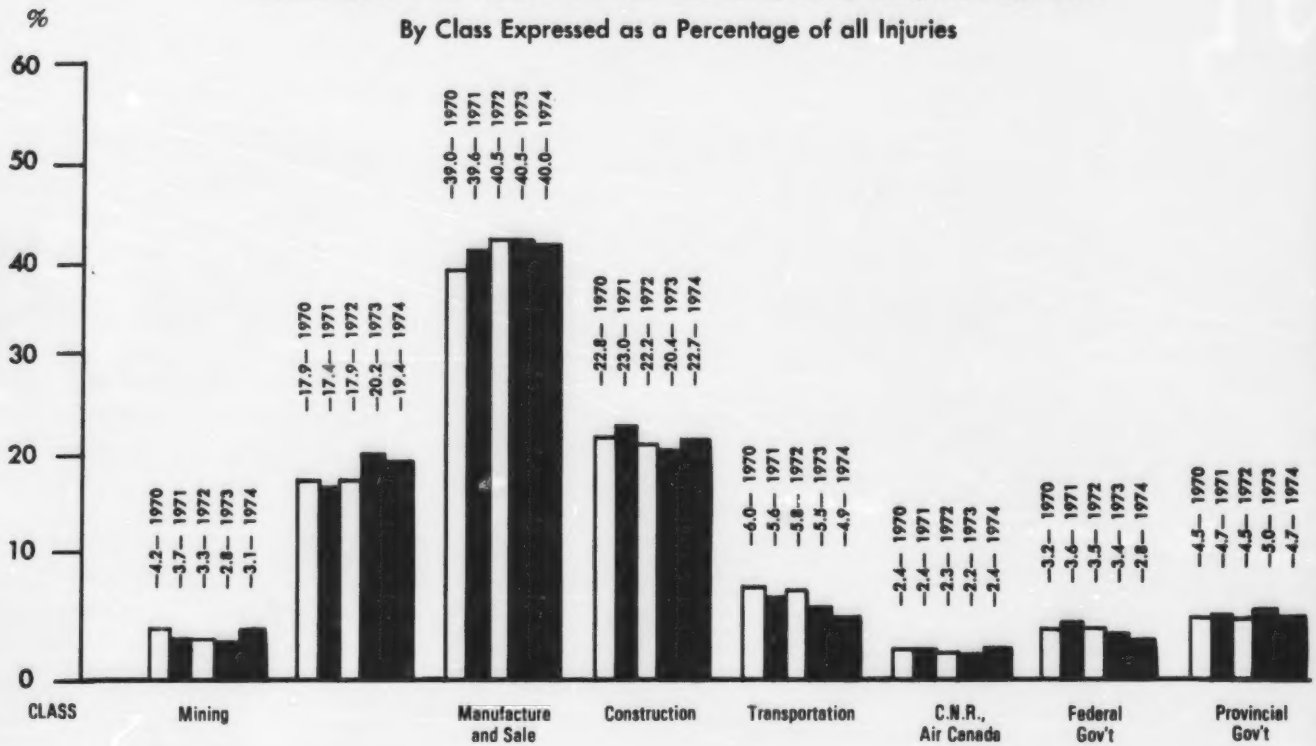


FIGURE 3
CAUSES OF INJURIES
Expressed as a Percentage of Total

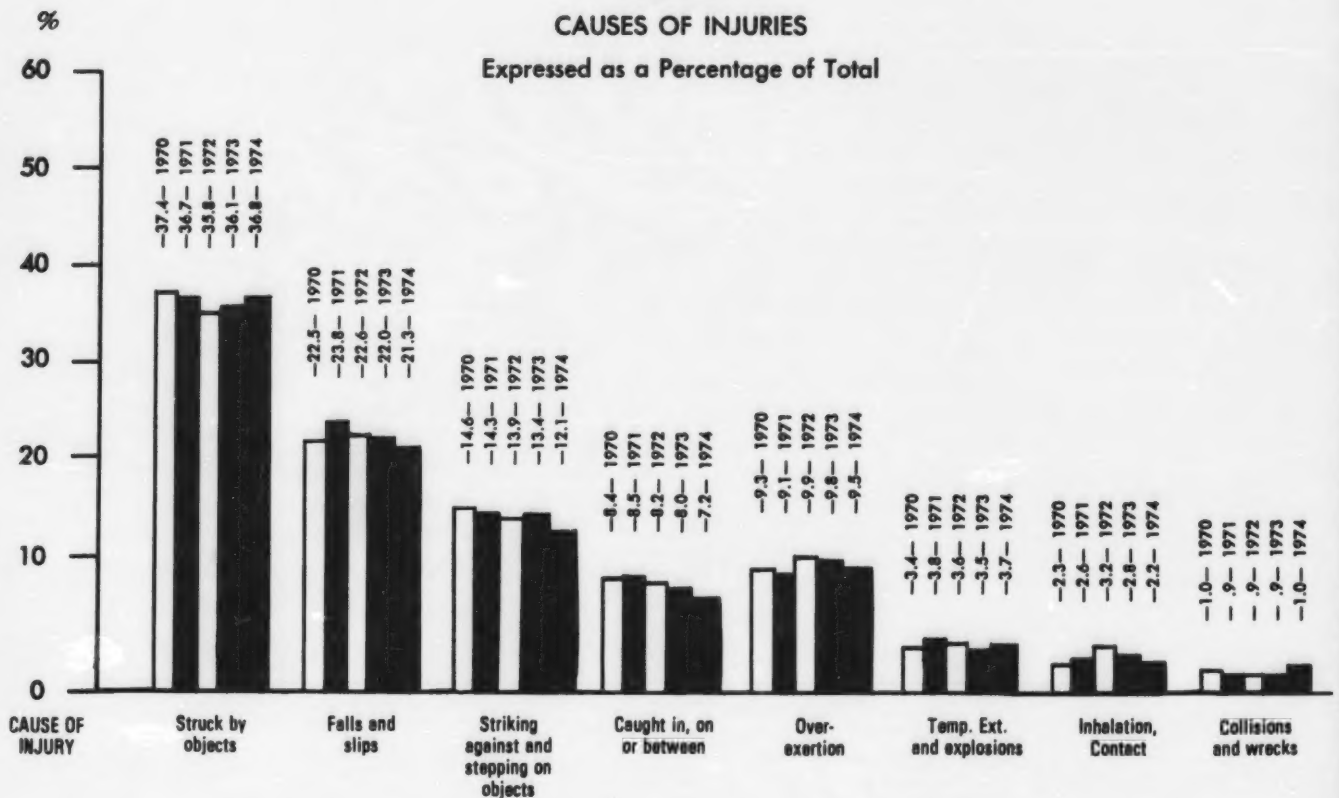


FIGURE 4
NATURE OF INJURY
Expressed as a Percentage of all Injuries

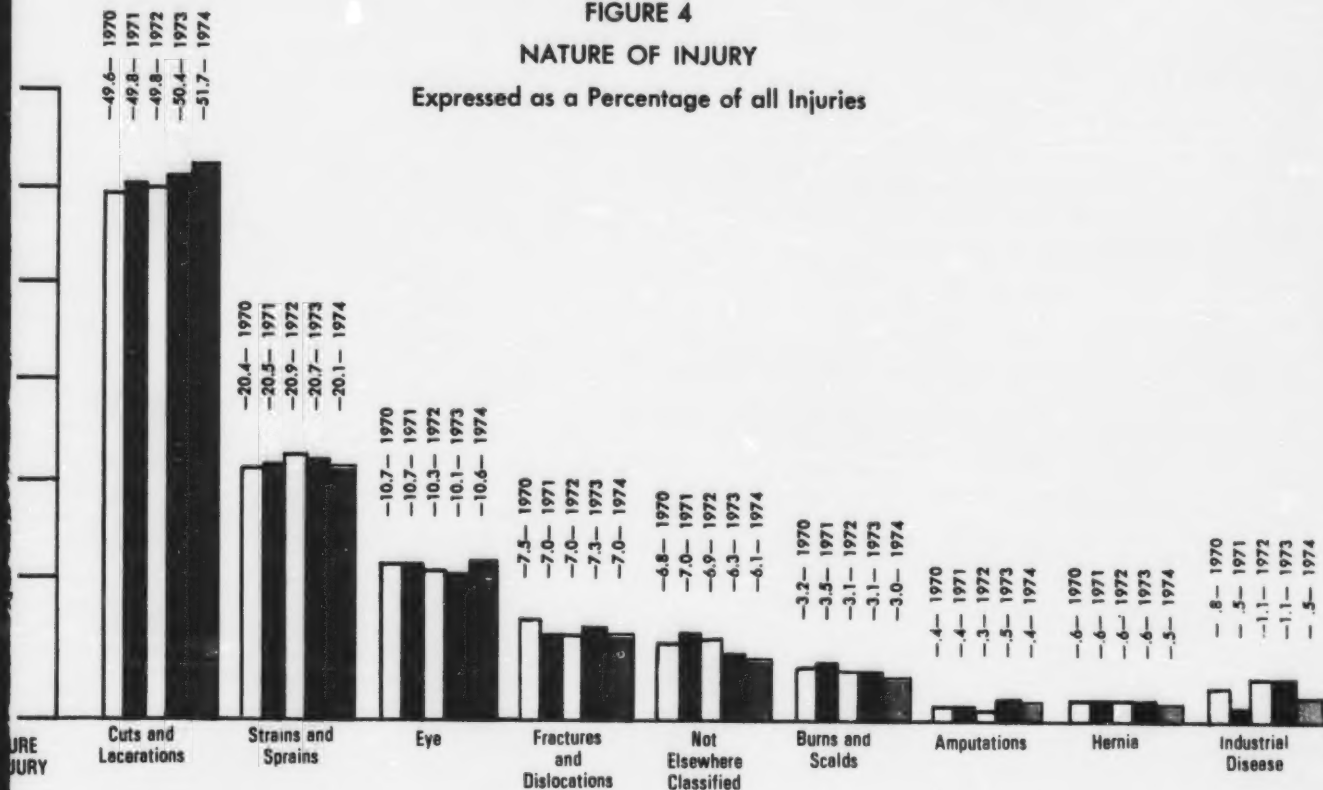


FIGURE 5
REGION OF INJURY
Expressed as a Percentage of all Injuries

